## **ABSTRACT**

The present invention provides microdevices, such as those used in the pharmaceutical and biotechnological fields, including an integrated memory. According to various embodiments, the integrated memory is readable, writable, and rewritable. The present invention further provides processing stations, e.g., for carrying out electrophoresis, pcr, genetic analysis, sample preparation, and/or sample cleanup, etc., that are capable of reading from and/or writing/rewriting to such memory.